



Naval Surface Warfare Center Crane Division

Advance Planning Briefings for Industry



29 MAR 2011

**Tim Airborne Electronic Warfare Systems
Cornwell**

**Gary
Clayton**



Description of Portfolio

Airborne EW and Aviation ISR and Weapons

- **This Portfolio provides acquisition engineering, technology transition, integration, and life cycle support services for sensors and weapons on manned and unmanned aircraft**
 - Airborne Electronic Warfare Attack and Defensive Systems
 - Infra-Red Counter Measures
 - Advanced Sensors Technologies
 - Electro Optic/Infra-Red Technologies
 - Synthetic Aperture Radar
 - Signal Intelligence
 - Gun Weapon Systems
- **Customers include:**
 - NAVAIR PEO-A, PEO-T, PEO-U&W, PEO-JSF and AIR-1.0
 - United States Air Force
 - United States Army
 - USA
 - Foreign Military

Financial Overview

- \$573M Obligation Authority
- 749 Government work years
- 211 Contractor work



Airborne Electronic Warfare Systems

Strategic Environment

- **Electronic Warfare, as a whole, is healthy.**
- **Across the five year defense plan electronic warfare research, development, test & evaluation budgets trend downward an estimated 10% for all services with the exception of United States Marine Corps which increases 40%**
- **Navy continues to dominate research, development, test & evaluation investments by 2:1 over the other services. The Army is a distant second with less than 50% of Navy investment and Air Force close to the Army in third**
- **A multitude of opportunities are being pursued Within Crane's current customer base with high probability of success in Airborne Electronic Attack, Intelligence, Surveillance, Reconnaissance, Infrared Counter Measures and Electronic Warfare Defensive Systems**
- **The electronic warfare leadership community indicates traditional and distinct lines between electronic warfare capabilities will diminish with development of ubiquitous autonomous systems and integrated distributed electronic warfare**

Aviation ISR and Weapons Strategic Environment

- **This portfolio is well aligned to the high demand areas of Intelligence, Surveillance, Reconnaissance , counter insurgency, and unmanned systems in the Defense and National Security budgets**
- **2010 QDR: “Expand manned and unmanned aircraft systems for intelligence, surveillance, and reconnaissance.”**
 - USAF Grow Predator/Reaper Orbits
 - USA to Accelerate Production of Extended Range Multi-Purpose Unmanned Aerial Vehicle (Grey Eagle)
 - Navy to introduce sea-based Unmanned Aircraft Systems and develop innovative sensor technologies



Airborne EW Systems/Aviation ISR and Weapons Strategic Themes

- **Electronic Warfare**
- **Electronic Warfare/Information Operations Leadership**
- **Spectrum Management**
- **Irregular Warfare**
- **Electronic Protection**
- **Technology Transition**



Airborne EW Systems/Aviation ISR and Weapons Critical Areas

- **Airborne Electronic Warfare Systems**
 - Electronic Warfare Support
 - Unmanned Aviation Systems Electronic Warfare Payloads
 - Airborne Advanced Sensors
 - Electronic Warfare / Information Operations Leadership
- **Aviation Intelligence, Surveillance and Reconnaissance and Weapons**
 - Unmanned Aircraft Systems
 - Payload Integration
 - Technology Transition
 - Partnerships



Airborne Electronic Warfare Systems

Electronic Warfare Support

- **GOAL**
 - Key support for Electronic Warfare Support and Intelligence, Surveillance and Reconnaissance systems
- **OBJECTIVES**
 - Become nationally recognized leader in electronic support systems
 - Increase advocacy
 - Achieve critical mass and improve positioning
 - Increase percentage or proportion of electronic support tasking within NAVAIR and other government agencies
- **INITIATIVES**
 - Support sponsors as they develop a new electronic support identity
 - Pursue program office credentialing
 - Develop full life cycle electronic support technical capabilities
 - Pursue national recognition for electronic support expertise and leadership
 - Integrated Product Team leadership and participation



Airborne Electronic Warfare Systems

UAS Electronic Warfare Payloads

- **GOAL**

- Development and integration of airborne unmanned and autonomous electronic warfare and intelligence, surveillance and reconnaissance payloads

- **OBJECTIVES**

- Become nationally recognized leaders in unmanned electronic warfare and intelligence surveillance and reconnaissance payloads
- Build advocacy, critical mass and improve strategic positioning
- Increase support to all services, other government agencies and the Department of Homeland Security

- **INITIATIVES**

- Build upon current design efforts
- Develop and integrate nanotechnologies
- Focus on power consumption/reduction
- Support other service efforts to develop unmanned electronic warfare capability
- Identify opportunities, develop advocacy in target areas and market capabilities



Airborne Electronic Warfare Systems

Airborne Advanced Sensors

- **GOAL**

- Move toward improved positioning. Build advocacy and significantly increase critical mass for specific customers

- **OBJECTIVES**

- Improve positioning with specific customers
- Build advocacy
- Increase critical mass
- Significantly increase support of program offices

- **INITIATIVES**

- Host new capabilities (monuments)
- Pursue advocacy and improve positioning from within the sponsors organizations.
- Increase support of leadership roles to satisfy urgent national security requirements.



Airborne Electronic Warfare Systems Electronic Warfare / Information Operations Leadership

- **GOAL**

- Nationally recognized leadership and integration into customer organizations building advocacy and improving positioning. Gain a working knowledge and understanding of roles, responsibilities and the environment in which these positions must operate.

- **OBJECTIVES**

- Intentional managed growth of personnel
- Increase value of Crane participation and positioning
- Credentialing
- Increase number of national leadership positions and rotations within customer organizations
- Leadership opportunities

- **INITIATIVES**

- Identify key nationally recognized positions directly related to the Airborne electronic warfare and intelligence, surveillance and reconnaissance capabilities.
- Identify persons of interest from existing pool of candidates or new hires
- Coordinate, apply and/or compete for positions
- Staff positions with permanent change of stations, temporary duty or rotations



Airborne EW Systems Aviation ISR and Weapons

Partnership Opportunities

- **Industry**
 - Design development
 - Idea Generation
 - Marketing
 - Sustainment
- **Academic**
 - Research
 - Design development
- **Future Opportunities May Include:**
 - Aircraft Integration
 - Aircraft Modifications
 - Technology Transition
 - Test & Evaluation Equipment

**Across the Focus Areas and
Life Cycles**



Airborne Electronic Warfare Systems Strategic Summary

- **Many opportunities exist**
- **In today's economic environment we must learn to partner**
- **The Warfighter is counting on our support**

Naval Surface Warfare Center Crane Division

Advance Planning Briefings for Industry

A large blue diamond shape with a white border is centered on the slide. Inside the diamond, the text "APBI 2011" is written in a large, white, sans-serif font. The diamond is superimposed over a square frame containing four images: a submarine on the left, a missile launch on the top right, a naval ship on the bottom left, and an aircraft on the bottom right.

**APBI
2011**

"Warfighter Success - Supporting the Warfighter"

